

New England Biolabs Certificate of Analysis

Product Name: *ApaLI*
Catalog Number: *R0507L*
Concentration: *10,000 U/ml*
Unit Definition: *One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA (Hind III digest) in 1 hour at 37°C in a total reaction volume of 50 µl.*
Packaging Lot Number: *10147391*
Expiration Date: *04/2024*
Storage Temperature: *-20°C*
Storage Conditions: *50 mM KCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA*
Specification Version: *PS-R0507S/L v1.0*

ApaLI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0507LVIAL	ApaLI	10147392	Pass
B6004SVIAL	rCutSmart™ Buffer	10143288	Pass

Assay Name/Specification	Lot # 10147391
Endonuclease Activity (Nicking) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of supercoiled M13mp19 DNA and a minimum of 50 Units of ApaLI incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	Pass
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 100 units of ApaLI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda-HindIII DNA and a minimum of 100 Units of ApaLI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of Lambda-HindIII DNA with ApaLI, >95% of the DNA	Pass

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fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, >95% can be recut with ApaLI.	

This product has been tested and shown to be in compliance with all specifications.

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.



Penghua Zhang
Production Scientist
13 Apr 2022



Josh Hersey
Packaging Quality Control Inspector
13 Apr 2022